#### **WAN Acceleration**

### **Dell SonicWALL WXA 1.3.1 Release Notes**

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## **Release Purpose**

WXA 1.3.1 runs in 64-bit mode for WXA 5000 and 6000 series appliances. This release introduces new features and greatly improves stability, which utilizes the 64-bit mode to handle more concurrent connections.

## **Platform Compatibility**

The WXA 1.3.1 release is supported on the following Dell SonicWALL WAN Acceleration (WXA) series appliances:

- WXA 6000 Software
- WXA 5000 Virtual Appliance
- WXA 4000
- WXA 2000
- WXA 500 Live CD

WXA 1.3.1 is supported to work with Dell SonicWALL E-class NSA, NSA, or TZ series appliances running SonicOS 5.8.1.0 or higher firmware.

Note: Some WXA features are not supported unless running SonicOS 5.8.1.11 or higher firmware.

#### WXA 6000 Live CD

The WXA 6000 Live CD requires:

- A Dell SonicWALL E-class NSA, NSA, or TZ series appliance
- An unused interface on the Dell SonicWALL NSA/TZ series appliance configured with a LAN Static IP address and a DHCP lease scope. Please refer to the WXA Quick Start Guide for more information
- A Monitor and Keyboard
- A Dell PowerEdge R320 server with the following specifications:

Processor	Intel® Xeon® CPU E5-2420 0 @ 1.90GHz , 6 Cores
Memory	RAM : 32 GB ECC DDR3, 1333 MHz Video Memory : 16 MB
RAID Controller	PERC H310 Mini
Hard Drive	2x 400 GB SSD (Intel SSD DC S3700 Series) 2.5" SATA SSD with 3.5" Hard drive bracket
Embedded NIC	2x Broadcom® 5720 dual-port 1Gb LOM



### WXA 5000 Virtual Appliance Requirements

The WXA 5000 Virtual Appliance requires:

- An E-class NSA, NSA, or TZ security appliance
- An unused interface on the NSA or TZ security appliance configured with a LAN Static IP address and a DHCP lease scope. Please refer to the WXA Quick Start Guide for more information
- A server running VMware ESX or ESXi version 5.0 or higher is recommended
- 2 virtual CPUs
- 250 GB hard disk
- 4GB RAM
- A layer 2 network between the ESX Server and the NSA/TZ series appliance. This is required for communication between the WXA 5000 on your ESX Server and the NSA/TZ series appliance

### WXA 500 Live CD Requirements

The WXA 500 Live CD requires:

- An E-class NSA, NSA, or TZ security appliance
- An unused interface on the NSA/TZ series appliance configured with a LAN Static IP address and a DHCP lease scope. Please refer to the WXA Quick Start Guide for more information
- Monitor and Keyboard
- A Dell OptiPlex 3010, Dell Inspiron 660s, or Dell Vostro 270s with:

Processor	Pentium 4 or higher
Memory	Minimum of 2GB
Hard Drive	Minimum of 80 GB
Optical Drive	CD/DVD ROM bay

## **Firmware Compatibility**

**SonicOS** 

The table below details the SonicOS and WXA firmware compatibility.

#### **WXA**

	1.3	1.2	1.1
6.1 and above	X	×	
5.9	Х	X	
5.8.1.11 or higher	X	×	
5.8.1.0 - 5.8.1.10	X*	X*	Х

<sup>\*</sup> Some WXA features will not be available.



## **Upgrading Information**

### WXA 500, WXA 2000, and WXA 4000

If you are upgrading a WXA 500, WXA 2000, or WXA 4000 running firmware version 1.0, you must perform the following steps:

- 1. Upgrade to version 1.2.2-0-7.
- 2. Clear the browser cache.
- 3. Upgrade to version 1.3.1.
- 4. Clear the browser cache.
- 5. If you are using WFS for Signed SMB, rejoin the WXA to the domain.

### WXA5000

The WXA 5000 cannot be upgraded from version 1.2.2-0-7 (or before) to 1.3.0 (or later). The WXA 5000 was changed from a 32bit OS to 64bit OS. So, to make this upgrade, you must reinstall the virtual machine.

### **Upgrades**

The upgrade (.bin) files and OVA (for a fresh WXA 5000 install) can be downloaded from the Download Center on MySonicWALL under the appropriate model heading:

https://www.mysonicwall.com/

## **Browser Support**









The WAN Acceleration management interface uses advanced browser technologies, which are supported in the most recent browsers. Dell SonicWALL recommends using the latest Chrome, Firefox, Internet Explorer, or Safari browsers for administration.

This release supports the following Web browsers:

- Chrome 18.0 and higher
- Firefox 16.0 and higher
- Internet Explorer 8.0 and higher (do not use compatibility mode)
- Safari 5.0 and higher

Mobile device browsers are not recommended for Dell SonicWALL appliance system administration.



### New Features in WXA 1.3.1

The following new features are introduced in WXA 1.3.1:

### Adding New Virtual Disks to the Cache

The Dell SonicWALL WXA 5000 is an Open Virtualization Appliance (OVA). The WXA 5000 has a 250 GB hard disk. The hard disk is partitioned such that most of the space is allocated as a cache partition. The cache partition holds the TCP and WAFS acceleration databases and the Web Cache objects.

The administrator can increase the size of the cache partition by simply adding a new virtual hard disk to the WXA appliance. The new disk space is then automatically allocated to the cache partition.

### Logging Enhancements

The **WAN Acceleration > Log** page has a new button to clear all the logs in the panel. The panel has a new column that shows the ID number of the message which should make diagnosing issues through Technical Support much faster. The Logging messages have been reviewed and made to read more relevant to the end user.

#### Store and Forward

The **Config** option provides the administrator with the ability to set up the Store and Forward feature for WFS. The Store and Forward feature is useful in cases where a user wants to transfer large files to an off-site WFS server, and then disconnect their PC without having to wait for a lengthy transfer to complete.

### WFS Signed SMB

A new page has been introduced for configuring Signed SMB. Basic and Advanced Modes can now be used alternately.

### Auto Download of Firmware Images

When configured, new firmware images can be automatically downloaded to the WXA in readiness to be applied.



## **Known Issues**

This section contains a list of known issues in the WXA 1.3.1 release.

## **Firewall**

Symptom	Condition / Workaround	Issue
The Web Proxy Server NAT policies to a secondary WXA are not automatically synchronized.	Occurs if the Web Cache is enabled on the primary WXA and there is a failover to the secondary WXA.  Workaround: After enabling the Web Cache, manually synchronize the settings by clicking the Synchronize Settings button.	127524
Network Address Translation (NAT) policies are not added for the Web Cache feature.	Occurs when enabling the Web Cache feature on an NSA/TZ series appliance with Virtual Local Area Networks (VLAN) configured.	120986

## **Firmware**

Symptom	Condition / Workaround	Issue
WXA5000 vSphere/vCenter reports 32 bit Guest OS pre-boot.	Occurs in L2B and Routed Mode where a NAT Policy is automatically created. Workaround: Either delete the NAT Policy or add the respective destination subnet in the "Web Cache" exclusions.	141889

# System Settings

Symptom	Condition / Workaround	Issue
Settings files using Japanese characters are not displayed correctly on the WAN Acceleration > System > Settings page.	Occurs when saving configuration settings to a file with Japanese characters in the name. Upload the file in the WAN Acceleration > System > Settings page and see that the file name is not displayed correctly.  Workaround: Use English characters in the file name.	126444



### Web Cache

Symptom	Condition / Workaround	Issue
Traffic is accelerated by the Web Cache component instead of the TCP Acceleration component as it should be.	Occurs in L2B and Routed Mode where a NAT Policy is automatically created.	147961
	Workaround: Either delete the NAT Policy or add the respective destination subnet in the "Web Cache" exclusions.	
The Web Cache does not work in Routed mode.	Occurs when enabling the Web Cache in a WXA deployment using Routed mode. Since the Web Cache was enabled after Routed mode was configured, the NAT policy created for the Web Cache gets a lower priority.  Workaround: Disable Routed mode, then reenable it. This created a new NAT policy for Routed mode with a lower priority than the Web Cache NAT policy.	141255
Some videos on YouTube are allowed to be viewed as "WebM" files.	The "WebM" file format is not supported by this feature.	122758
The Web Cache feature can be incorrectly enabled.	Occurs when running the WXA 500 Live CD in Memory Mode and enabling the Web Cache feature on the Network > Web Proxy page. This checkbox should not be available in Memory Mode.	122054

## WFS Acceleration

Symptom	Condition	Issue
For some file formats and in certain bandwidth conditions, non-cached traffic may be slower than expected.	Occurs when copying files between sites using WFS Acceleration > Unsigned SMB.	138503
A "DNS registration failure: 68" displays in the Join Domain Results screen.	Occurs when registering the WFS server in the Domain Name System (DNS).	134421
The WXA tries to obtain domain computer information through an offline or non-existing domain controller instead of a working one, causing the management interface to display the following message: No server found on the domain, try again later.	Occurs when the user adds a new server while using Signed SMB.  Workaround: Remove offline, no public name, or incorrect IP name server records on the DNS server.	132953



## **Resolved Issues**

This section contains a list of resolved issues in the WXA 1.3.1 release.

### **Resource Monitor**

Symptom	Condition / Workaround	Issue
CPU and Memory utilization are reported in logs and remedies applied in sustained conditions.	Occurs when the appliance becomes heavily loaded.	148884

### **SMB**

Symptom	Condition / Workaround	Issue
WFS Signed SMB does not respond.	Occurs when a share is removed without the WFS component being restarted.	153110
WFS Unsigned SMB traffic forwarding stops.	Occurs after a reboot where Unsigned SMB connections may not be forwarded to the acceleration component.	149323

# System

Symptom	Condition / Workaround	Issue
System internal components rely on a version of the BASH software that is vulnerable to the "SHELLSHOCK" issue CVE-2014-6271.	WXA is a closed system, so there are no known external exploit vectors.	152525
OpenSSL software for SSLv3 is vulnerable to the "POODLE" issue (CVE-2014-3566).	WXA is a closed system, so there are no known external exploit vectors.	153185



## **Deployment Considerations**

Consider the following when setting up the WXA series appliance within your network:

- When the WXA series appliance is placed on the LAN zone, connections from the WLAN zone will not be redirected to it. When the WXA series appliance is placed on the DMZ zone, connections from the WLAN zone can then be processed by the Web Cache.
- Upgrading from WXA 1.0.x firmware to WXA 1.1.1 and higher firmware requires re-joining the domain and clearing the browser cache.
- Using WFS Acceleration Signed SMB requires joining the WXA series appliance to the domain. Any paths to shares need to be remapped on each client PC.
- Internet Protocol Version 6 (IPv6) is not supported.
- Only Kerberos and NT LAN Manager Version 2 (NTLMv2) are supported for WFS Acceleration.
- Only Microsoft Windows based file servers are supported. This includes all supported versions of Microsoft Windows Server (2003, 2008, and 2012) and excludes Network Attached Storage appliances from third party vendors.
- The WAN Acceleration Client (WXAC) is supported on the following:
  - Windows Vista
  - Windows XP
  - o Windows 7
  - Windows 8
  - Windows Server 2003 and 2008

**Note**: WXAC is not supported on Windows Server 2012.

WXAC is not supported on Mac OS or Linux.

- Dynamic routing is not supported for TCP Acceleration.
- Network Address Translation (NAT) is not supported for TCP acceleration.
- Domain Auto-Join is not supported on the WXA 500 Live CD and WXA 5000 Virtual Appliance.
- Running the WXA 500 Live CD or 6000 Software inside a virtualization host (like ESXi, Xen or VirtualBox) is not supported.
- The default Web Cache maximum object size is 50 megabytes.



## **Upgrading the WXA Firmware**

This section details the procedures for upgrading the latest firmware image to the WXA series appliance. All the firmware image upgrading procedures for the WXA series appliance are performed through the NSA/TZ series appliance's management interface. Both appliances must have compatible firmware versions. Upgrading both appliances to the latest firmware versions should complete this task.

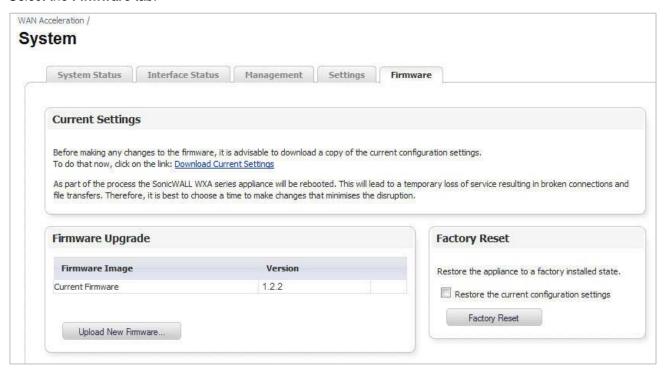
**Note**: Upgrading the WXA 5000 Virtual Appliance to WXA 1.3.1 from 1.2.x or earlier is not supported. is not supported, you must perform a fresh installation of WXA 1.3.1. This is because the WXA 5000 Virtual Appliance is a 64-bit system in WXA 1.3.1, and a 32-bit system in WXA 1.2.x.

### Upgrading the WXA Series Appliance Firmware

Before making any changes to the firmware, Dell SonicWALL recommends that you download a copy of the current configuration settings. Upgrade files are large and the process of uploading can take a considerable length of time. It is recommended to change the period of inactivity before the Administrator is logged out (on the System > Administration page), so you are not logged out while waiting for the firmware file to upload.

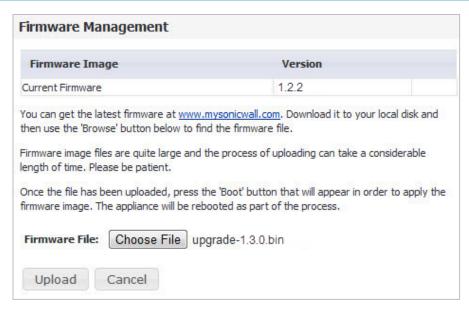
To upgrade to the latest WXA firmware, perform the following:

- 1. Login to your NSA/TZ series appliance.
- Navigate to the WAN Acceleration > System page.
- 3. Select the **Firmware** tab.



4. In the Firmware Upgrade panel, click the **Upload New Firmware...** button.

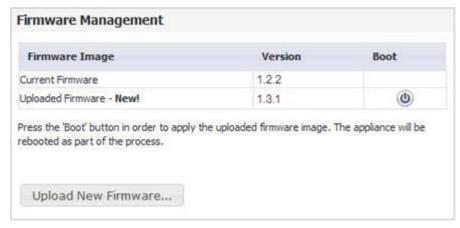




- 5. Click the Choose File button.
- 6. Select the WXA firmware image you downloaded from <a href="www.mysonicwall.com">www.mysonicwall.com</a>, and then click **Open**.
- 7. Click the **Upload** button.

**Note**: When performing a firmware upload, do **NOT** navigate away from the System > Firmware tab. This could stop the uploading process or cause the management interface to become unresponsive.

The firmware uploading process will take a few minutes. After the upload has completed, the Firmware Upgrade panel will repopulate with the updated information:



8. Click the **Boot** icon.

A confirmation pop-up is displayed:



9. Click OK.

The WXA series appliance reboots with the uploaded firmware version. This will take a few minutes.

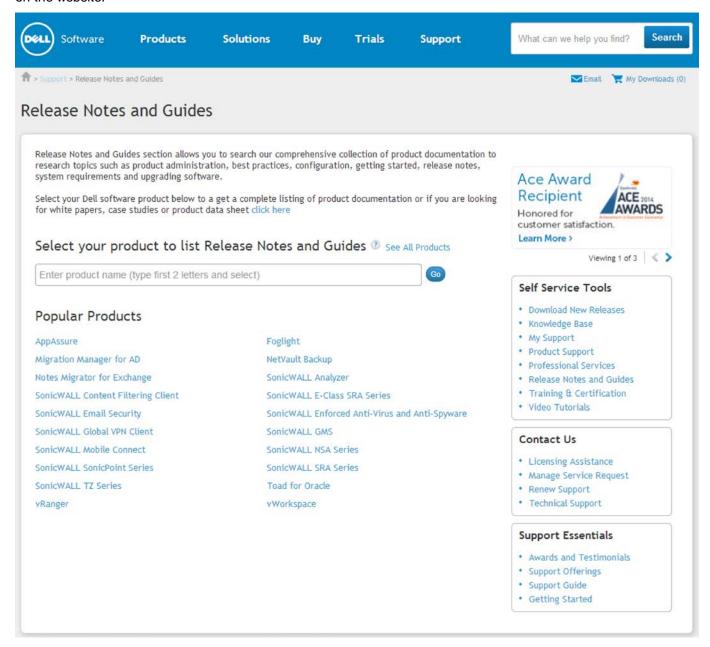
10. Clear the browser's cache, and then restart the browser.



### **Related Technical Documentation**

Dell SonicWALL user guides and reference documentation are available at the Dell SonicWALL Technical Documentation Online Library: https://support.software.dell.com/release-notes-product-select

For basic and advanced deployment examples, refer to SonicOS Guides and SonicOS TechNotes available on the website.



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